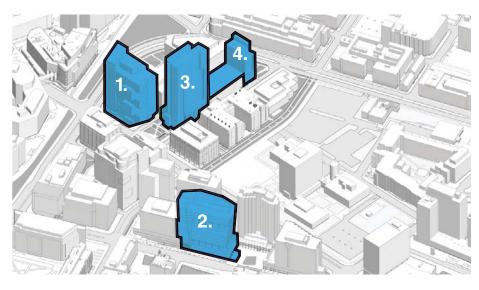


### **10.0 INTRODUCTION**



- 1. Commercial Building A (145 Broadway)
- 3. Residential Building South
- 2. Commercial Building B (325 Main St.)
- 4. Residential Building North

The following design guidelines are presented in a "ground up manner" that first considers the broader goals of the overall Project and then articulates specific guidelines for streets and public pathways, landscape materials, building form and massing, building materials and guidelines for each of the proposed commercial and residential projects. The Guidelines are divided into the Following Sections:

- Key Goals and Objectives
- II. Character of Streets and Pathways
- III. Landscape Material
- IV. Built Form and Massing
- V. Building Material and Facade Guidelines

The Design Guidelines are intended to both establish goals and objectives and inform the design of the multiple components of the Approved Concept Plan, which was authorized by Special Permit (PB #315). In addition to the guidelines described herein, the Kendall Square Design Guidelines of 2013 (K2) and the KSURP of 2015 apply to the project components of the MXD Infill Development Concept Plan.

The end of each guideline section includes a series of graphics to more clearly communicate the spectrum of existing regulations, site assumptions, architectural and urban design principles through a series of diagrams and associated annotations.

The specific building massings shown throughout this submission responds to the directives and suggestions outlined in this document with the expectation that further changes and design evolution may occur during the Design Review process for individual projects as outlined in Article 14.

The Guidelines and objectives presented here are not intended to be limiting or prescriptive in nature but are instead intended to inform important design considerations in a cohesive and thoughtful manner. The associated images, in particular, are intended to offer illustrative precedent and not literal examples. In the interest of supporting continued evolution in design thinking and approaches throughout the life of the Project, additional or alternative design solutions may be presented to the Planning Board, CRA Board, CDD staff or the CRA staff.

### I. KEY DESIGN GOALS AND OBJECTIVES

The following goals and objectives are intended to guide and support the successful execution of the MXD Infill Development Concept Plan as a whole. Overall, the Approved Concept Plan is an infill development proposal that is bounded by the realities of existing development and infrastructure while seeking to contribute to the evolution of Kendall Square as a neighborhood with varied and complimentary uses. A set of Design Objectives are primarily provided for the MXD District in sections 501 and 702 of the KSURP. However, with the approval of the IDCP, the following goals shall also apply broadly to the district as a whole:

- 1. Create a complementary mix of uses that contribute to Kendall Square's evolution as a 24/7 Live Work and Play neighborhood.
- 2. Create permeability with pedestrian and bicycle connections through the site blocks within the district especially those routes that strengthen ground floor active use and retail.
- 3. Provide access to outdoor and indoor public spaces that allow people to enjoy them throughout day and evening.
- 4. Enhance connections between existing open spaces and public and private pedestrian and bicycle infrastructure.
- 5. Make housing available across multiple income spectrums as further defined in the Zoning Ordinance.
- 6. Design and build in a sustainable and resilient fashion.
- 7. Create buildings of appropriate scale, mass, height, form and texture for their site context on its parcel, the block, and in relation to the width of the street or adjacent open space, with the goal of optimizing light, air and views for all both inside and outside the buildings.
- 8. Building and open space design enhances and embraces that life in a dense urban setting happens vertically by including public and private open spaces such as balconies, terraces and rooftop decks.

### II. CHARACTER OF STREETSCAPE AND PATHWAYS

The following section describes the guidelines for the streetscape and publicly available pathways. This section presents general guidelines that apply to Broadway, Galileo Galilei, Binney Street, Main Street the 6th Street connector and Pioneer Way. In addition to these general guidelines, City Street standards shall apply as well as the joint CRA's May 2017 City ALTA cycle track design that will impact portions of Broadway, Galileo Galilei Way, Binney Street and Main Street. At the time of this submission the ALTA CRA's May 2017 cycle track has been advanced to a Schematic Design level of detail.

For specific information on the vision for associated open spaces and parks in the Concept Plan Amendment, please refer to Chapter 3, Open Space. Note that all public space proposals will evolve with the design of each applicable building or project as more thoroughly described in Chapter 9, Phasing, and will be submitted concurrently with design review for each building. The following guidelines shall apply to all streetscapes and pathways subject to modification in the design review process:

- 1. Streets shall be designed to improve pedestrian and bicycle access, circulation, and safety.
- 2. Streets shall be designed to allow for separated circulation paths for pedestrian bicycles and automobiles to minimize conflict and ensure safety.
- 3. Intersections between private access roads and streets shall be carefully designed to compromise between the variable needs of pedestrians, bicycles, automobile traffic, bus traffic, delivery trucks and emergency service vehicles.
- 4. Where possible, lay by areas shall be planned to allow for safe access to ride sharing vehicles.
- 5. Bike racks shall be included in a manner consistent with zoning for short or long term bike uses, and dedicated space provided for municipal bike share systems as required by PTDM or Zoning.
- 6. Lighting shall be provided consistent with city standards that balances concerns between light pollution, safety, and the creation of a compelling evening streetscape, outdoor patio, retail, and open space environment.
- 7. Where possible, planted areas and permeable hardscape shall be included to allow for water infiltration.
- 8. Street furnishing shall be included consistent with City Standards to allow for points of gathering, rest, and for public transit uses.

### III. LANDSCAPE MATERIALS DESIGN GUIDELINES

The following section sets forth the design goals and objectives for the landscape materials that will be used throughout the broader MXD Infill Development Concept Plan, and within the individual building sites. Specific manufacturer reference should be considered solely as precedent examples to help illustrate a guideline. The following material guidelines apply to open spaces and parks that are part of the MXD Infill Development Concept Plan, and are included as part of Chapter 3 of this submission. The following guidelines shall apply to all landscaping materials subject to modification in the design review process:



CONCRETE UNIT PAVER

#### **PAVING**

- 1. All paving materials should be able to withstand high volumes of pedestrian movement and harsh weather conditions. Paving should be able to accommodate garage entrances, retail loading areas, vehicular crossings, and de-icing treatments.
- 2. In the event of damage, repair or utility work, hardscapes should be easily repairable with matching materials. Pavements must be slip resistant and safe for pedestrian traffic. Paving that utilizes lighter coloring can help reduce heat island effect and can count towards LEED credits. The following are pavement recommendations:
- 3. Paving should be predominantly used to minimize tripping hazards along the pedestrian clearway zone.
- 4. Specialty paving should be used to highlight entries to buildings or parks, mid-block crossings or public art. Paving over tree spaces should be porous, either by utilizing porous pavers, setting unit pavers on a pervious setting bed or using tree grates.
- 5. Within the district, concrete pavers may be used to signify primary building entries and stairs. Sidewalks along Broadway, and Galileo Galilei Way will typically be cast in place concrete with saw cut joints, scoring patterns, and/or texture. Compacted almost-flush decomposed granite and or a Flexi-pave surface material could be considered an option for surfacing when permeability is necessary.



CAST-IN-PLACE CONCRETE



DECOMPOSED GRANITE

### III. LANDSCAPE MATERIALS DESIGN GUIDELINES

#### **FURNISHINGS**

- 1. Benches, tables and other types of seating should be located in a variety of settings to allow a choice of scenery and social settings. Within the district, a mix of fixed and movable chairs, as well as tables will be provided to allow for informal gatherings, outdoor eating, studying and socializing.
- If located in sunny areas, umbrellas or shading devices will be considered.
- Playful, relaxed types and shapes of furniture should be considered, including Adirondack Chairs, lounges, swings and similar.
- 4. In addition to movable tables and chairs, fixed benches may be used along the East West Connector, or potentially near building entrances, including vestibules, and other covered spaces.
- 5. Within the district core, seat walls or colored concrete benches (preferably with wooden seats) will be used to provide seating in or around the edges of these spaces. Walls shall be concrete with optional metal and wood components and be compatible in material, pattern and color with immediately adjacent buildings. Capstones will be granite or precast concrete. Seat walls should be set level.
- The litter receptacle that should be used throughout the district is the 'collect' as supplied by "landscapeforms," or "Big Belly," with top or side opening, or similar. Finish shall be polyester powder coat in color 'silver,' 'titanium,' or 'black,' matching the color chosen for the benches.







- 1. BigBelly Smart Waste Management System
- 2. Apex Forms and Surfaces
- 3. Radium mmcite







- 3. Tably mmcite
- 4. Portigoa mmcite

#### **BIKE RACKS**

1. In all district areas, the 'Bola Rack', or similar, shall be used. Racks should be anchored to a concrete base, and shall preferably be stainless steel, receive a hot dipped galvanized finish, or a powder coat finish in black. Spacing of the racks shall conform to Bicycle Rack Cambridge Standards.



**BIKE RACKS** 

- 5. Bola Landscapeforms
- 6. Bikepark mmcite



10. DESIGN GUIDELINES

#### LIGHTING

The primary function of exterior lighting is the safety of drivers, cyclists and pedestrians at night, but it plays an equally important role in complementing architecture and urban form to provide a sense of place before and after sunset. Exterior lighting sources shall be light emitting diode (LED), unless approved by city staff.

Developments in the MXD District shall observe the following guidelines with respect to exterior lighting:

- 1. The primary function of exterior lighting is the safety of drivers, cyclists and pedestrians at night, but it plays an equally important role in complementing architecture and urban form to provide a sense of place before and after sunset. Exterior lighting sources shall be light emitting diode (LED), unless approved by city staff. Developments in the district shall observe the following guidelines with respect to exterior lighting:
- 2. Exterior walls of buildings may be illuminated at a regular intervals by wall-bracketed or accent up/down lighting, and such lighting should enhance the building's architectural expression. Where a feature such as a soffit or arcade is employed in the architectural design of a building, lighting should be recessed into that feature.
- 3. Pedestrian light fixtures should be no more than 14 feet (14') tall, and be anchored by a pedestal base that is of proportion to the height and circumference of the pole of a complementary material.



GOOD NEIGHBOR LIGHTING





- 1. See "Good Neighbor Lighting" PDF in Appendix
- 2. See Chapter 15.22 Outdoor Lighting Section 15.22.050 1. Prescriptive Standard

LIGHTING

- 6. Amenity Lighting (LED)
- 7. Cree Edge Series

### III. LANDSCAPE MATERIALS DESIGN GUIDELINES

#### **WATER FEATURES**

Water features of the proposed public realm can play a vital role in providing places to create visual interest and serve as a landmarks or focal points. The design will integrate water features in the urban landscape as stormwater collection, storage and or circulation. Guiding principles for introducing water features into the pedestrian realm are as follows:

- 1. Use of high-quality stone products and applications that complement adjacent architecture.
- 2. Locate water features with the landscape zone, building zone, or open space locations. Water features should be kept out of the sidewalk zone of the streetscape, in order not to impede pedestrian movement.
- 3. Design considerations should take into account the appearance during winter months or other periods when the water feature is turned off.



WATER FEATURE / RUNNEL



RUNNEL SIGNAGE



DECOMPOSED GRANITE



WATER SPOUTS

#### **EXISTING / ADAPTED GARAGE STRUCTURES**

Within the MXD district, recent developments have proposed to mask existing garage structures with new building proposals. For exposed parking garage surfaces, murals and screening devices or the continuation of building facade fenestration can be introduced when appropriate to mask or enliven these existing structures without impacting necessary open area for ventilation of the garage functions.

Within existing parking structures opportunities for enhanced wayfinding graphics can be applied to surfaces for greater pedestrian safety and information



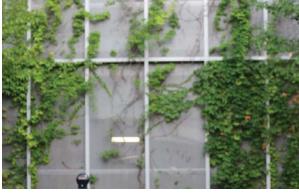














The following section sets forth the design goals and objectives for massing and built form of the proposed commercial and residential buildings that form the MXD Concept plan. In addition, a building specific component is included in these guidelines to help address guidelines in a site specific context including relationships to public spaces and streetscapes. The built form and massing guidelines attempt to strike balance between multiple important considerations including visual interest, interior functionality, market demand, environmental impacts, sustainability and programmatic flexibility among others. Note that all proposed massings in the MXD Concept plan will evolve with the design of each applicable building or project and through the design review process for each building. The following guidelines shall apply broadly to all proposed massings and built forms and specifically to each building and subject to modification in the design review process:

- 1. Create dynamic varied street walls to help frame sidewalks, plazas, and other public spaces while allowing for breaks in street wall to define entries to buildings. Varying materials and massing forms may be employed to prevent monolithic or flat street wall.
- 2. Use building mass to establish street corners, urban thresholds or create landmarks.
- 3. Create a variety of forms and rhythm, appropriate to urban context and street width.
- 4. Introduce vertical breaks in facades where appropriate to define entries or other programmatic changes.
- 5. Create interesting and varied rooflines identifiable from the ground and at a distance.
- 6. Create or support appropriate contextual datum lines to limit sense of height at street level.
- 7. Provide transition to adjacent context (parks, buildings).
- 8. Visually connect outdoor public realm with indoor public spaces.
- 9. Use recessed or projected entryways, canopies, awnings, etc., to enhance pedestrian experience, and provide weather protection to the sidewalk.
- 10. Architectural contrast is encouraged, while being deferential to the existing signature architectural elements of any existing buildings and/or blocks.
- 11. Use massing to mitigate potential wind impacts as described in wind studies provided as part of each building's Design Review submission.

#### **COMMERCIAL BUILDING A (145 BROADWAY)**

Located at the intersection of Broadway & Galileo Galilei Way, Commercial Building A at 145 Broadway Street is a 19 story office building with active ground floor uses. It is a highly visible gateway to Kendall Square, as it occupies two major public streets, Broadway and Galileo Galilei Way. In addition it is located directly adjacent to Broadway Park. The following are the design guidelines for Commercial Building A:

- 1. Activate the adjacent public realm with public plaza, active use, and lobby spaces.
- 2. Active use space on the ground floor extends along Broadway and wraps the corner of Galileo Galilei Way.
- 3. Massing at the corner of Broadway and Galileo Galilei Way establishes a strong urban presence and highlights the entry into the district.
- 4. Interlocking forms face Broadway Park to reduce a monolithic reading of the building to provide visual interest, and potential for green roofs, or roof decks adjacent to the public space.

### **COMMERCIAL BUILDING A (145 BROADWAY)**

LOT Size Existing: 37,862 SF

LOT Size Proposed: 57,097 SF

GFA: 441,614\*

FAR: 8

USE: Commercial

PARKING: 350

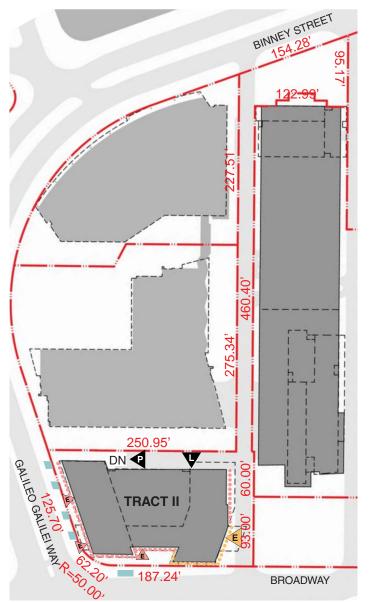
MAXIMUM HEIGHT: 250 FT

LOT COVERAGE: 39%\*

<sup>\*</sup>Numbers reflect revised lot.



MASSING- SOUTHEAST AXON



Parking Entrance

Entrance (per use type)

•••• Active Face (per use type)

First Floor Outline

Bicycle Parking
Public Outdoor Space

Landscaped Area Indoor/Outdoor

Visual Connection

Loading

---- Lot Boundary

Lobby
Active Use

--- Roof Line Above

PARCEL BOUNDARY

# RESIDENTIAL BUILDINGS NORTH AND SOUTH (BLUE GARAGE)

Located in the center of Parcel 2, the proposed Residential Buildings North and South contributes to the housing needs of the City of Cambridge including for rent, for sale, affordable middle income and market rate housing units. Comprised of two standalone buildings, one facing Binney Street to the North and the other facing Broadway Street to the South, the new construction will mask the existing blue garage parking deck, significantly improving the street-scape and pedestrian experience within the neighborhood.

The following are the design guidelines for South and North Buildings:

#### **South Building**

- 1. Setback from Broadway, fronting the Broadway Park
- 2. Standing at 350 feet, provides an opportunity for a landmark building and can be seen from afar
- 3. Dedicated loading off West Service Road, away from major pedestrian and traffic paths
- 4. A lobby (lobbies) on the ground floor facing Broadway Park
- 5. Massing of building emphasize slender, vertically-oriented proportion and vertical breaks as necessary to minimize monolithic form
- 6. Balconies that humanize the building and provide outdoor space
- 7. Social space/roof deck

#### **North Building**

- 1. Setback from Binney Street, fronting redesigned Binney Park
- 2. Stands at approximately 160 feet, in respect to lower height of the neighborhood to the north
- 3. Ground floor plan contains active lobby as well as dedicated retail or active use space
- 4. Dynamic vertical breaks break up the facade and provide visual interest on Binney Street
- 5. Social space/roof deck

### RESIDENTIAL BUILDINGS NORTH AND SOUTH (BLUE GARAGE)

Lot Size Existing: 91,848 SF

Lot Size Proposed: 72,613 SF

GFA: 421,053

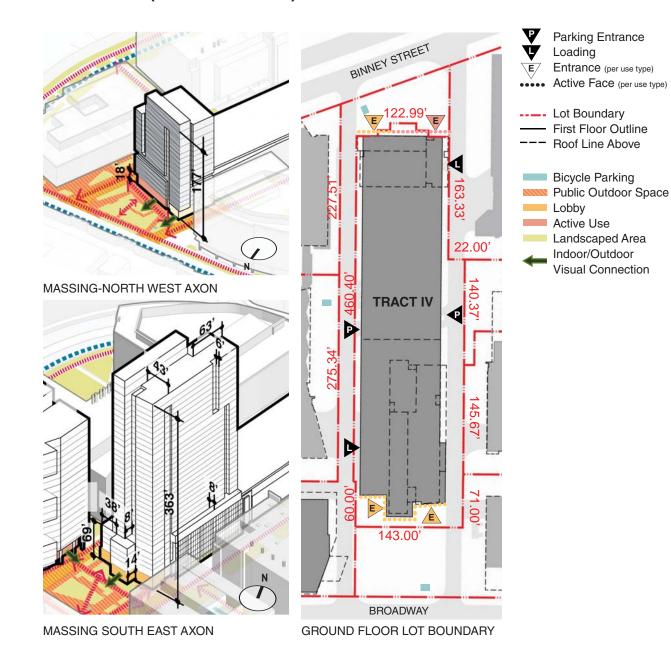
FAR: 8

USE: Residential

MAXIMUM HEIGHT: 350 FT

LOT COVERAGE: 71%\*

\*Number reflects revised lot.



#### **COMMERCIAL BUILDING B (325 MAIN STREET)**

Located on a very active block of Main Street, Commercial Building B at 325 Main Street is a 16 story office building with active ground and second floor uses. It is prominently situated across from MIT's campus and directly adjacent to Kendall Plaza and the MBTA Red Line Outbound Head House. The following are the design guidelines for Commercial Building B:

- 1. Activate the adjacent public realm with ground and second floor active use and lobby spaces.
- Active use space on the ground and second floors occupies the majority of the south facade along Main Street and the east facade facing Kendall Plaza.
- 3. Massing on Main Street marks the building entrance and relates to the adjacent context by stepping down to Kendall Plaza, holding the street edge along some portion of the facade.
- 4. Interlocking bays and recesses as well as vertical sloped planes break up the scale of the facade and create visual interest.
- 5. The building connects existing open space at Kendall Plaza and the future ground and second level retail experience to and from the existing Kendall Plaza and the Kendall Square Rooftop Garden.

### **COMMERCIAL BUILDING B (325 MAIN STREET)**

Lot Size Existing: 28,823 SF

TRACT IIIB TRACT V

ADDITION ON TRACT 5

Lot Size Proposed:

A+B+E 122,911 SF

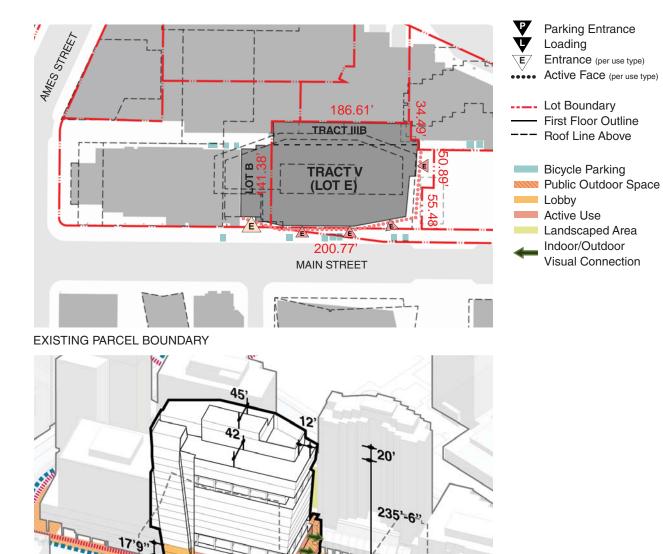
GFA: 387,187 SF

FAR: ≤ 8

USE: Commercial

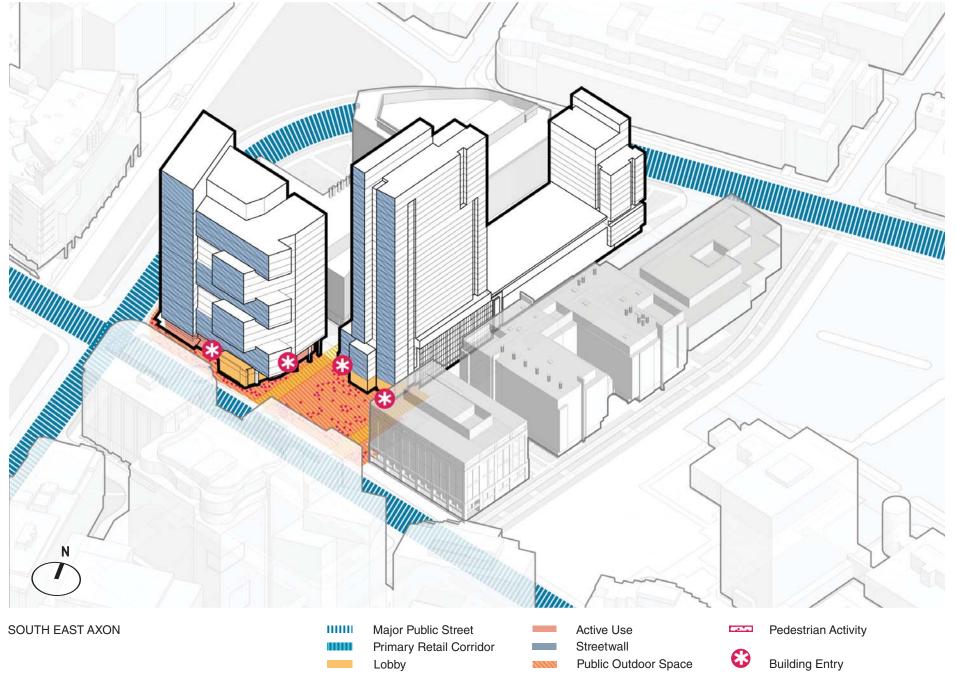
MAXIMUM HEIGHT: 250 FT

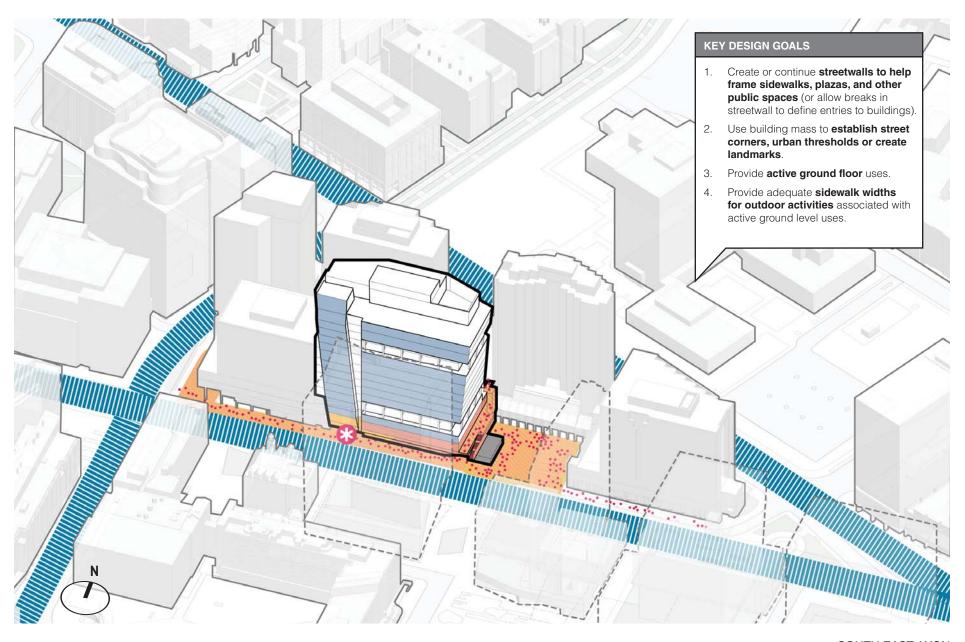
LOT COVERAGE: NA\*



MASSING- NORTHWEST AXON

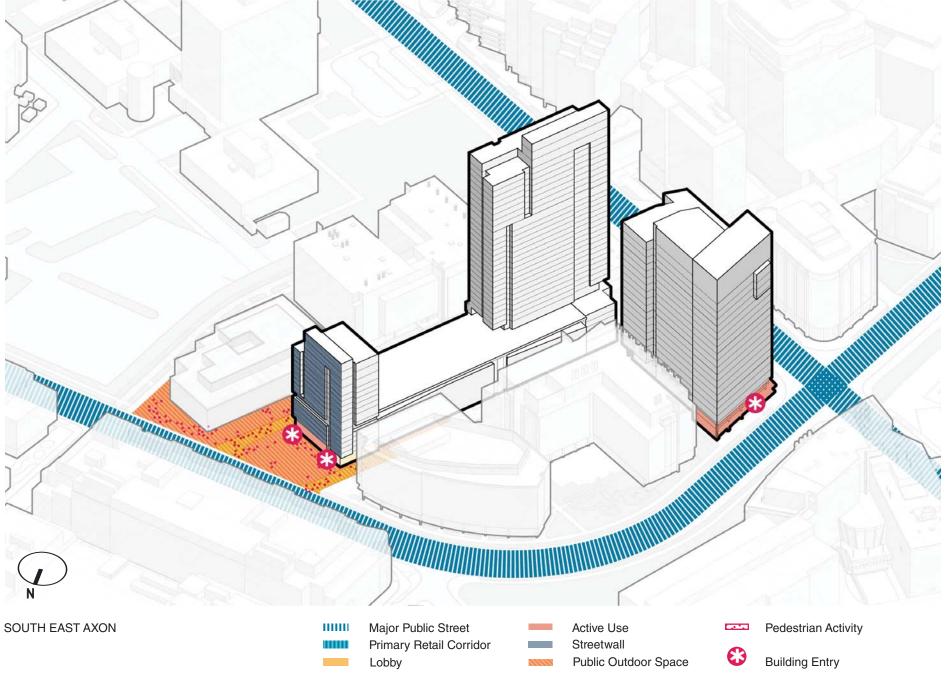
### **MAJOR PUBLIC STREET ENGAGEMENT**

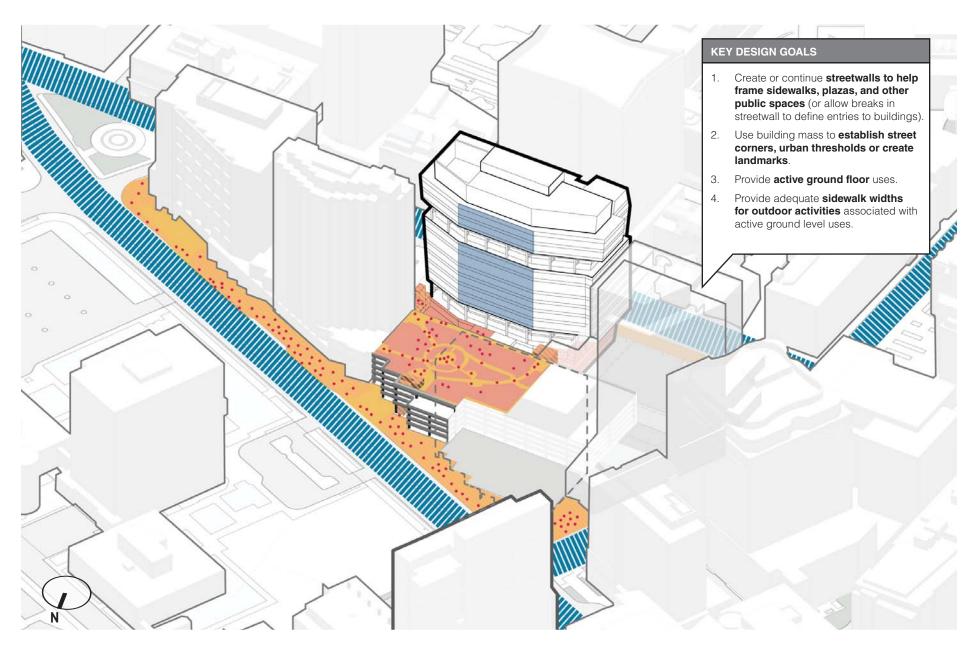




SOUTH EAST AXON

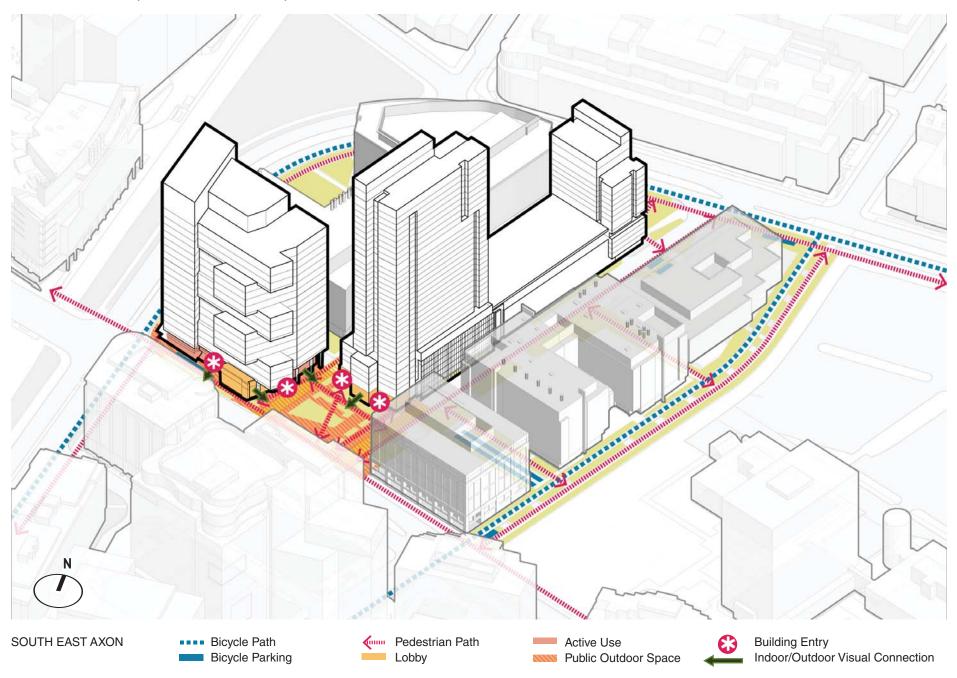
#### **MAJOR PUBLIC STREET ENGAGEMENT**

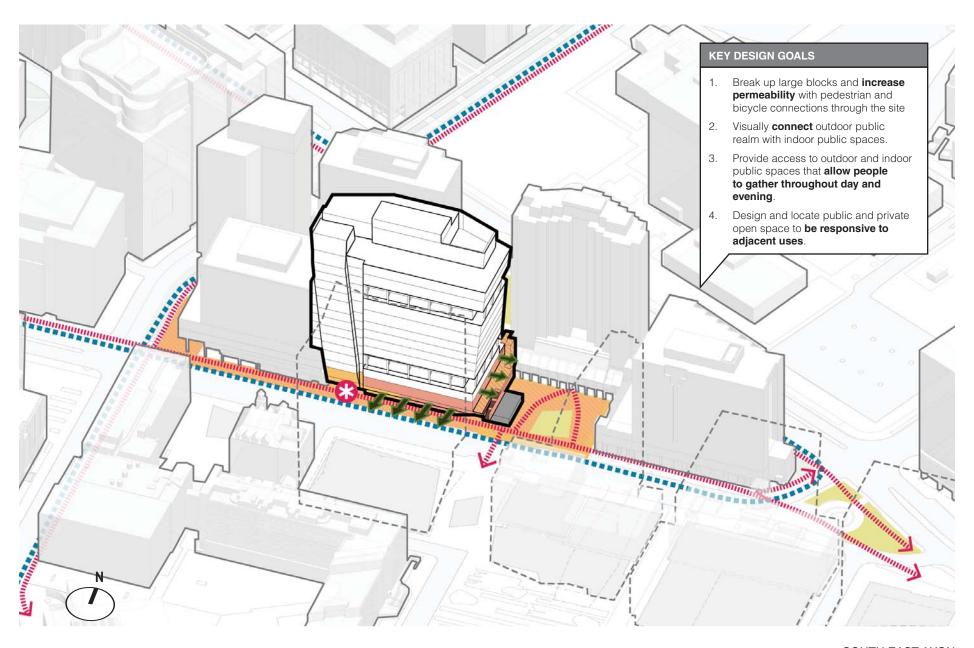




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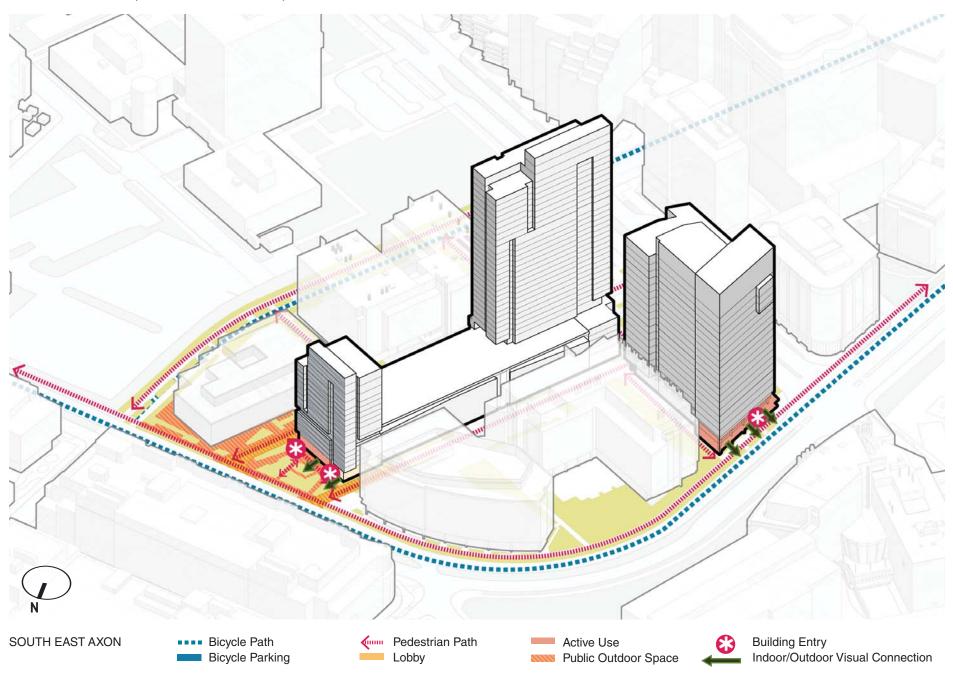
WALKABILITY, PERMEABILITY, AND PUBLIC REALM

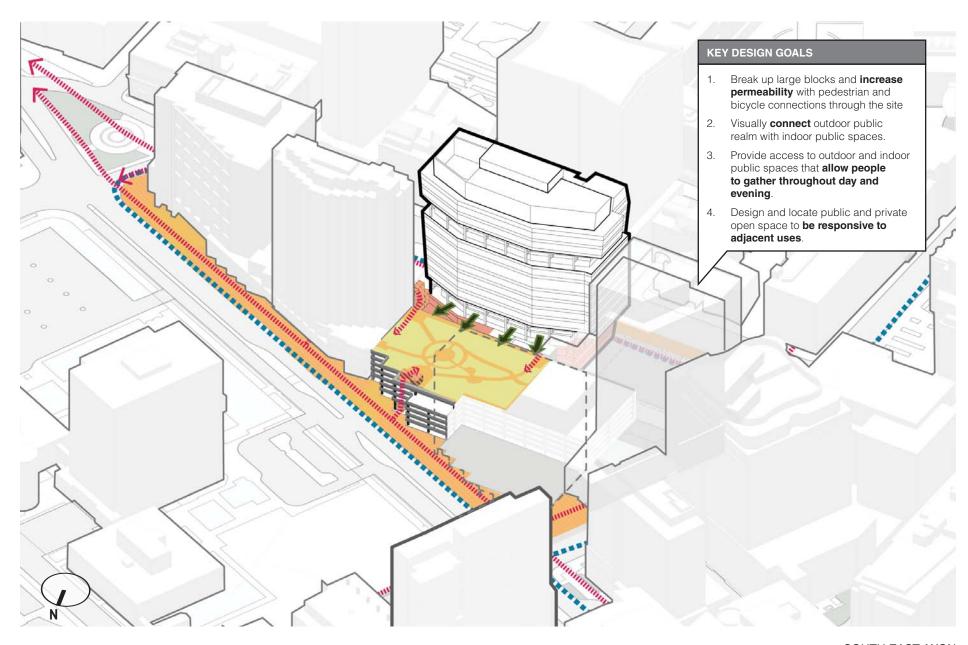




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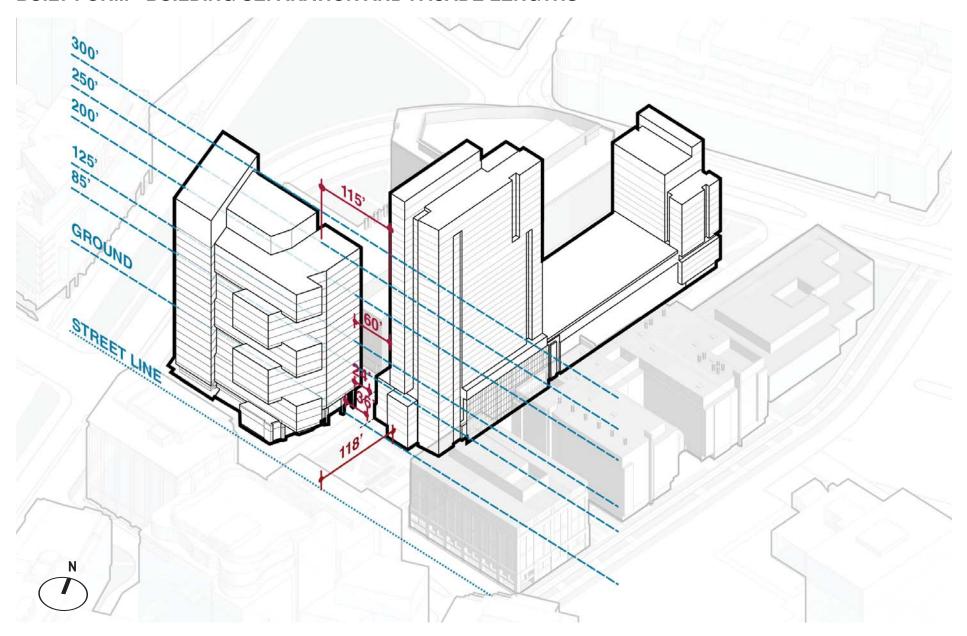
WALKABILITY, PERMEABILITY, AND PUBLIC REALM



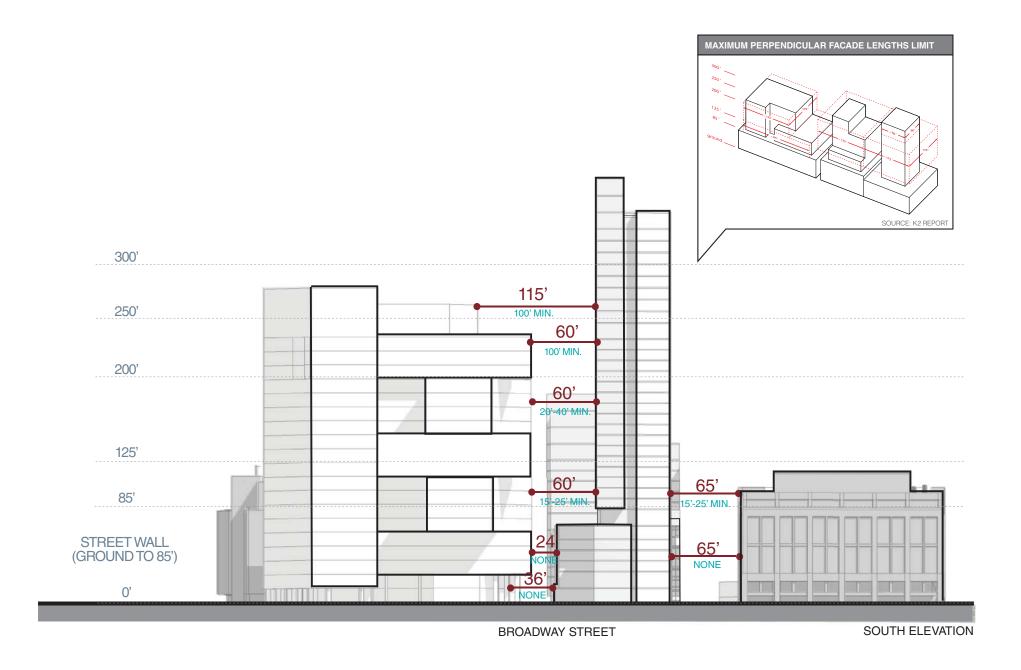


SOUTH EAST AXON

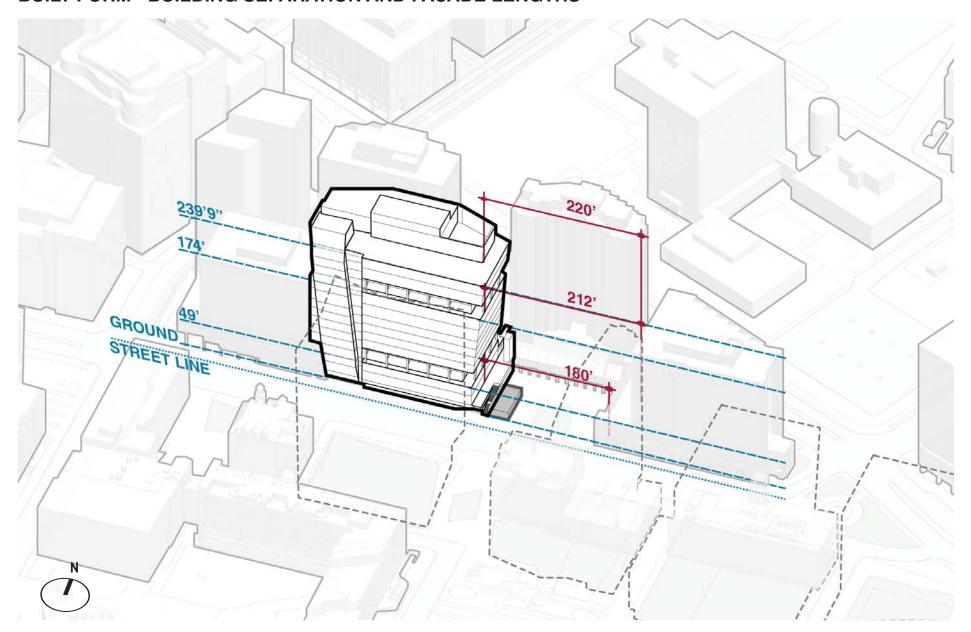
**BUILT FORM - BUILDING SEPARATION AND FACADE LENGTHS** 



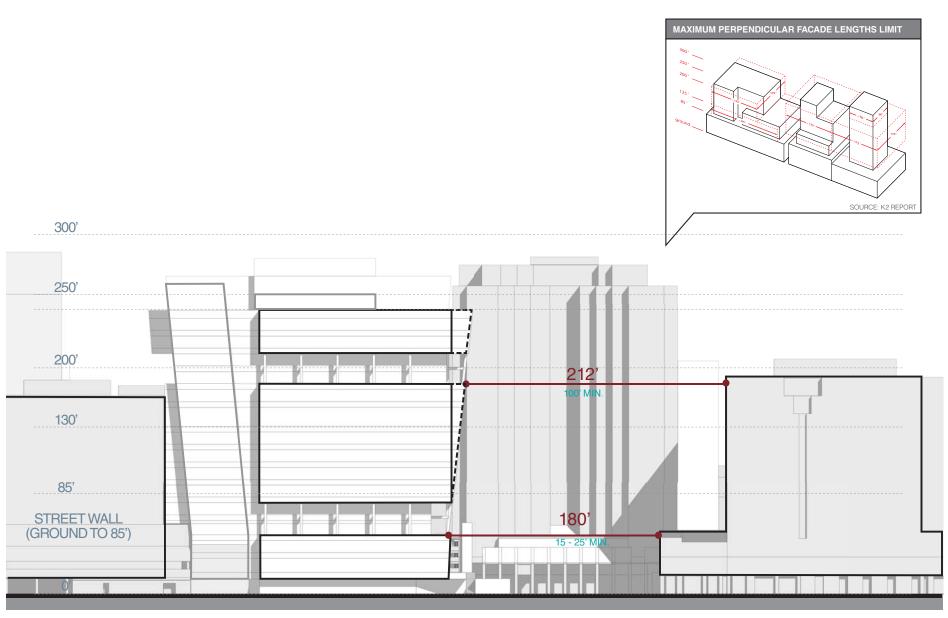
SOUTHEAST AXON



#### **BUILT FORM - BUILDING SEPARATION AND FACADE LENGTHS**

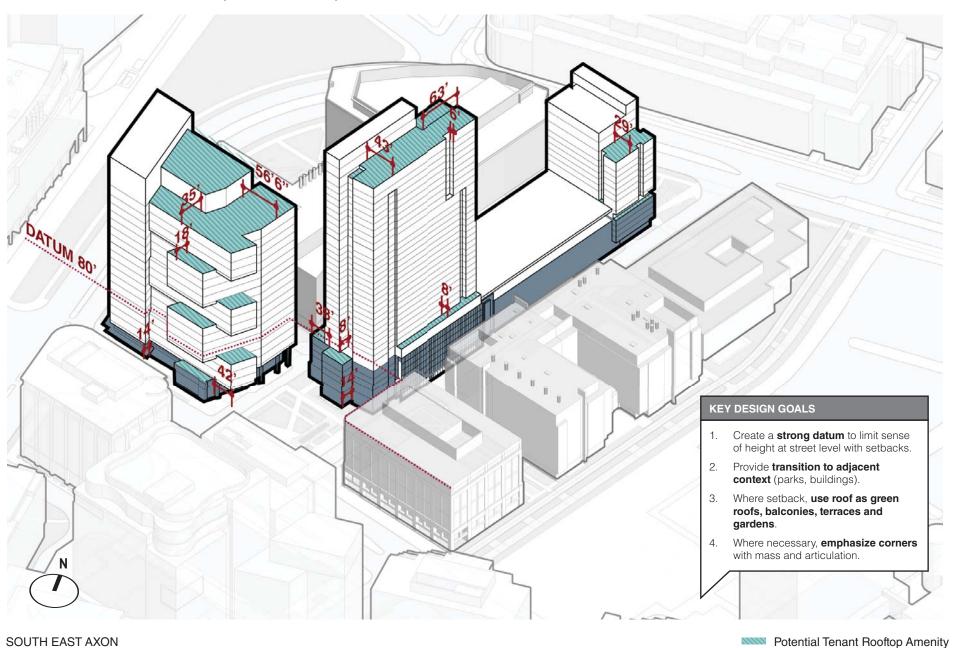


SOUTH EAST AXON

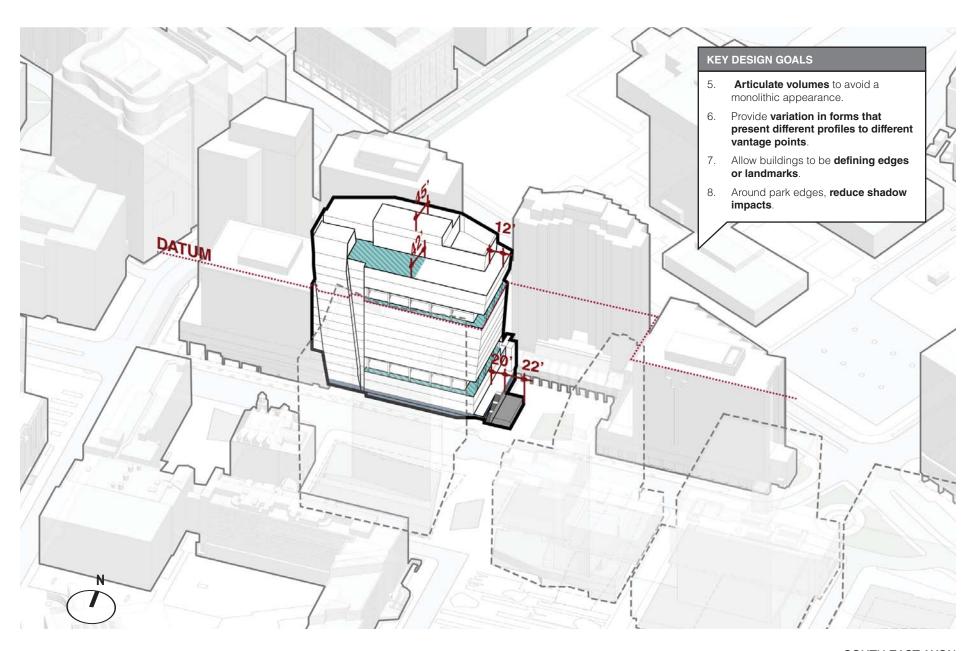


MAIN STREET SOUTH ELEVATION

**BUILT FORM - MASSING, SETBACKS, AND DATUM** 

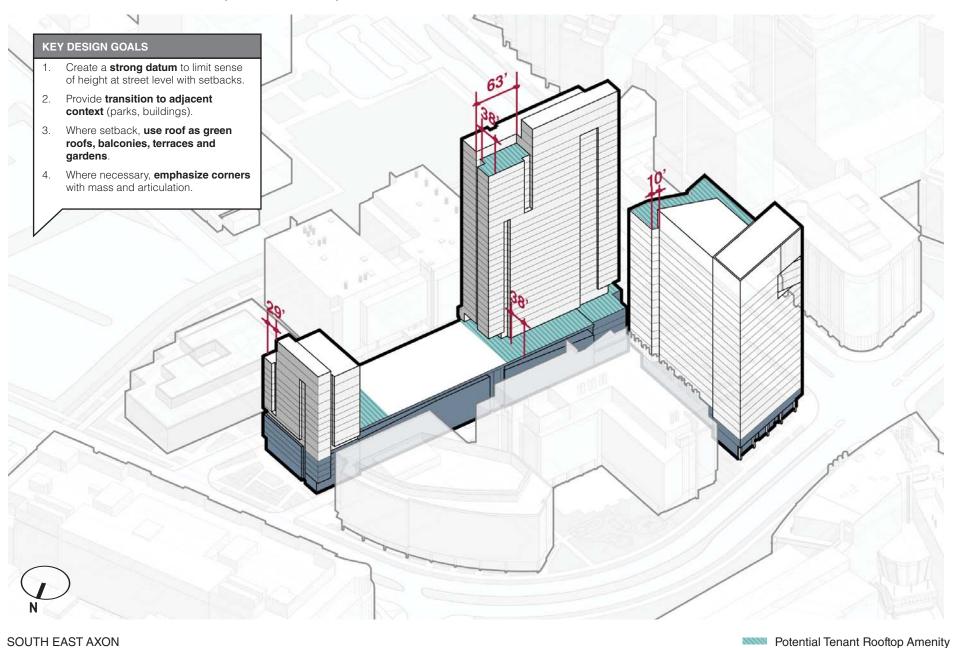


Ground Floor or Base Condition

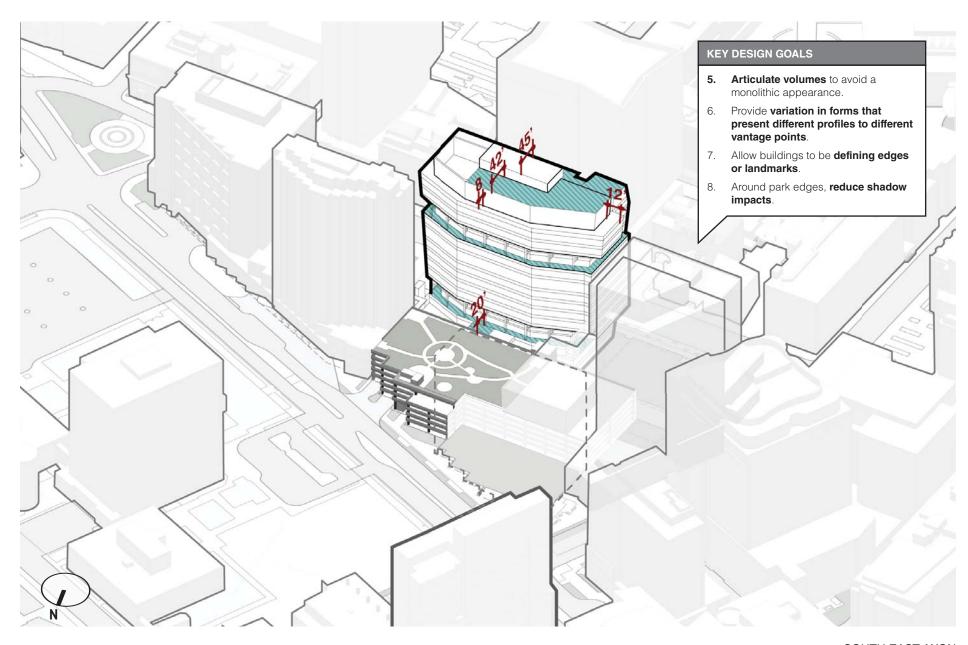


SOUTH EAST AXON

### **BUILT FORM - MASSING, SETBACKS, AND DATUM**

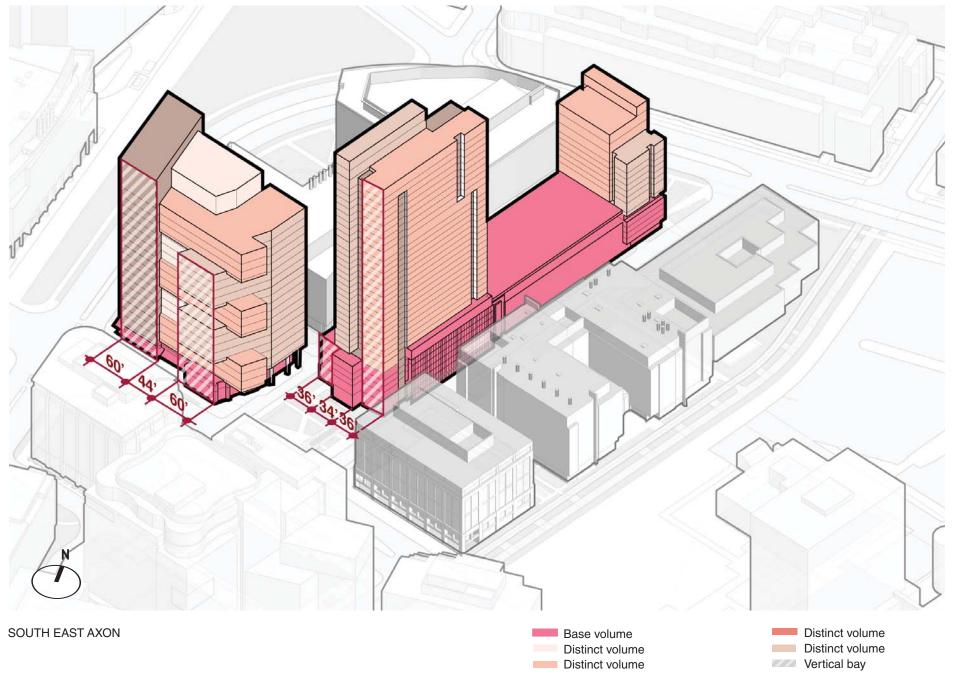


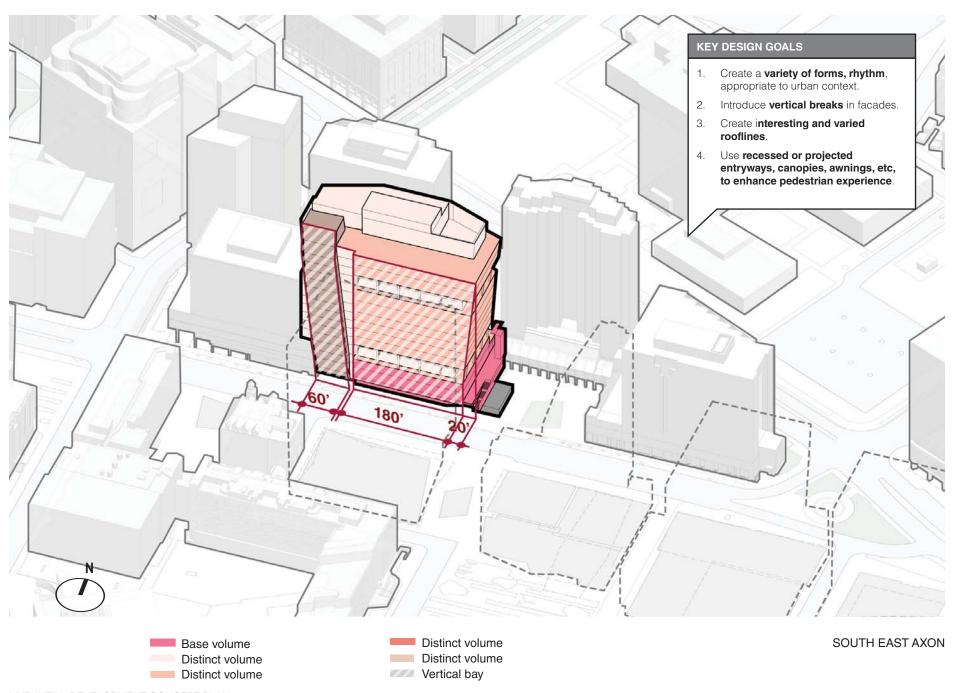
Ground Floor or Base Condition



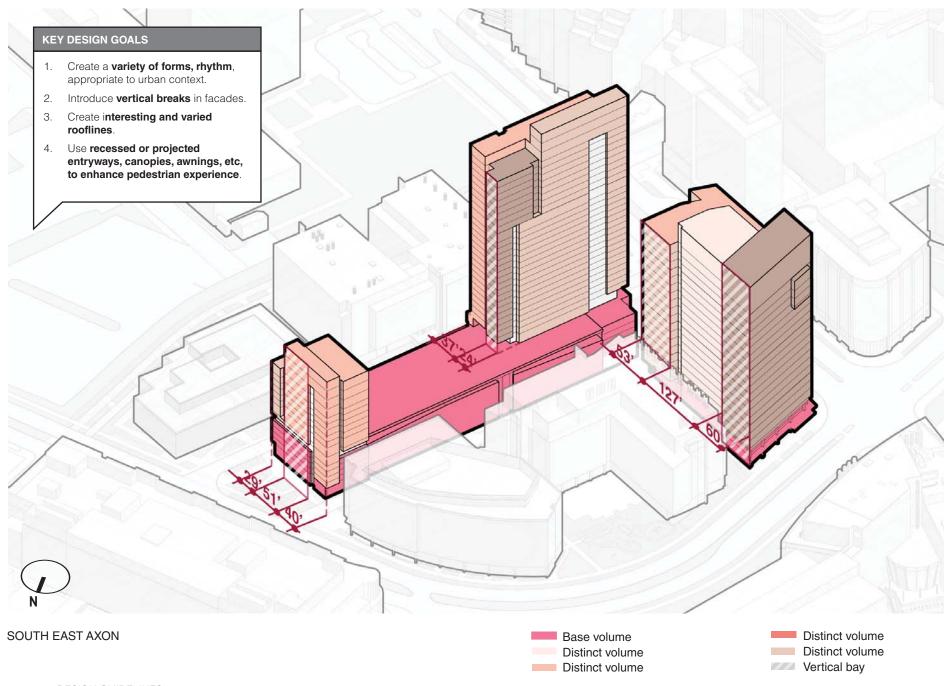
SOUTH EAST AXON

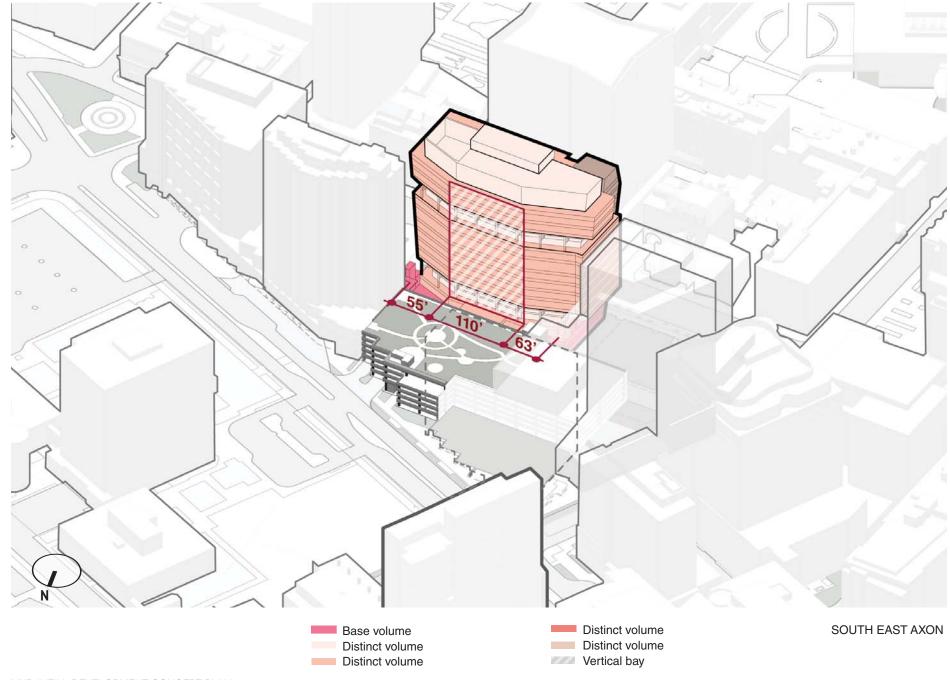
**BUILT FORM - MASSING AND VISUAL INTEREST** 





#### **BUILT FORM - MASSING AND VISUAL INTEREST**





### V. BUILDING MATERIAL AND FACADE GUIDELINES

The following section sets forth the design goals and objectives for the building and facade materials that will be used throughout the broader MXD IDCP concept plan and within the individual building sites. Specific manufacturer reference should be considered solely as precedent examples to help illustrate a guideline. The following material guidelines apply open spaces and parks that are part of the MXD concept plan is included as part of Chapter 3 of this submission. The following guidelines shall apply broadly to all commercial and residential facades as specified and subject to modification in the design review process:

#### **COMMERCIAL BUILDING MATERIALS AND FACADE**

- 1. Provide high transparency at the ground floor level to emphasize the activity within the building, extending the public realm and enlivening the streetscape.
- 2. Provide openness and permeability at the ground level and other retail/active use levels (if applicable) by providing sliding walls and raising doors at all possible locations.
- 3. Maximize transparency of glass at upper levels while considering solar heat gain, energy performance, and interior daylighting.
- 4. Use variation in glazing types, frame depths and scale of horizontal and vertical expressions to heighten visual interest.
- 5. Consider using reveals, recesses, and cantilevers to break down the proportions of large facades.
- 6. Introduce solid wall cladding, where appropriate, to embed the scale of occupants and interior spaces on the elevations in addition to allowing for complementary materials to the urban context.
- 7. Solid wall cladding should incorporate a mix of color and texture, depth, create shadows and incorporate middle scaling elements.





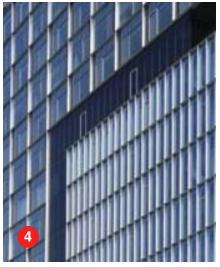
STREET LEVEL CONDITIONS





Curtain Wall Panels - Variation in glazing types, frame depths and scales of horizontal and vertical expressions heightens visual interest.





Glazed Volumes - Reveals and recesses in the facade breakdown the proportions of large facades. Plane changes on the facade allow opportunities for exterior spaces and introduce a smaller scale of inhabitation on the facade

**OPAQUE WALL AREAS** 

### V. BUILDING MATERIAL AND FACADE GUIDELINES

#### RESIDENTIAL BUILDING MATERIALS AND FACADE

- 1. Provide highly transparency glass at the ground floor to highlight the residential lobby and animate the streetscape.
- 2. Design well-lit and welcoming lobbies at the ground floor designed to be the entrance to someone's new home but also enliven the streetscape.
- 3. Employ material changes and various breaks in the building to reduce the scale of the building form the street.
- 4. Employ balconies to create outdoor space for urban living, to humanize the building architecturally, and to add visual interest and relief in large facades.
- 5. Employ punched window openings in the facade as a sustainable design approach that seeks to increase energy efficiency to meet the energy code and LEED requirements while using a combination of window glass and opaque materials to create interesting visual patterns.
- 6. Horizontal spandrels and other pattern facades can be used to accentuate thinner proportions within the building. These strategies work in combination to break down the scale of the mass..







